

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



July 16, 2013

Home Energy Rating System (HERS) Raters

SUBJECT: Using CalRatePro to Estimate Energy Consumption

Dear HERS Raters:

A recent California Public Utilities Commission study concluded that the EnergyPro Residential Performance Module, which provides the calculation method used by CalRatePro, may over-estimate energy consumption as compared to actual energy bills in existing homes. The California Energy Commission reminds raters of the following:

- As required in the HERS Technical Manual, and as CalCERTS' training manuals indicate, Whole House Raters must compare CalRatePro energy consumption estimates to available utility bill data, and provide the Energy Consumption Analysis report to the homeowner showing the results of the comparison.¹ When CalRatePro energy consumption estimates differ significantly from utility bill data, the HERS rater should inform the homeowner of the difference. The HERS rater should interview the homeowner to understand how their use patterns may vary from the standard assumptions used by the software, and take those differences into consideration in making recommendations for energy efficiency improvements.²
- When the software estimates show a variation of 30% or more from the energy bills, qualifying statements must be added to the recommendations page of the HERS report.³ As an example, qualifying statements may take the following form:

Home energy software estimates are based on typical occupancy patterns and thermostat settings, hot water use, appliance use, and other factors, which may be different than your household's use patterns. As a result consumers are cautioned that these software estimates may not match the household's actual energy savings. It's also possible that your energy use patterns may change after energy efficiency upgrades as household members adjust to new equipment and changed comfort conditions.

1 Cal. Code Regs, Title 20, Section 1672(h); HERS Technical Manual (HTM), Section 5.4; see p. 14 in the CalCERTS Whole House Technical Manual.


2 Cal. Code Regs, Title 20, Section 1672(i); HTM, Section 6.1; see p. 10 in the CalCERTS Whole House Technical Manual.

3 Cal. Code Regs, Title 20, Section 1672(k); HTM, Sections 2.1.8, 6.9; see pp. 8, 10-11 in the CalCERTS Whole House Technical Manual.

For additional information about the use of CalRatePro to estimate energy consumption and conduct HERS Ratings, please contact CalCERTS at 916-985-3400.

For additional information about the California HERS Program, please contact the California Energy Commission at Title24@energy.ca.gov, or call 916-654-5106 or 800-772-3300.

Sincerely,

A handwritten signature in black ink, appearing to read 'Pedro Gomez', with a large, sweeping flourish extending to the right.

Pedro Gomez
Manager
Building Standards Implementation Office